

Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

March 6, 1984

Mr. Neal H. Domgaard
Uintah County Commssioner
Uintah County Building
Vernal, Utah 84078

RE: Uintah County Tar Sands Mine PRO/047/022
Uintah County, Utah

Dear Mr. Domgaard:

Having held a meeting between the Division and Mr. Bob Nicholson, Uintah County Planner, with reference to the above cited proposed operation, it was agreed that the Division would detail deficiencies in the mining and reclamation plan which have been outlined to date. It should be noted, however, that the original MR-l submittal was generally quite deficient and that additional deficiencies may be discovered when a more comprehensive plan is resubmitted for Division review in the near future. The deficiencies outlined below have been correlated to the general rules and regulations for mined land reclamation in Utah.

## Rule M-3-(1)

A map (or maps) must be furnished which delineates any bodies of water within 500 feet of the exterior limits of the land affected. This map must also delineate the drainage plan on and away from affected areas. Specific areas for disposal of ore, overburden, interburden and topsoil must be indicated, as well as yearly sequential disturbance. Geologic information regarding test boring or core holes should be presented and depicted on a map for further insight into the overburden and interburden thicknesses as well as tar sands seam thickness. Such information will also provide evidence regarding existence or non-existence of ground water in the vicinity. For additional information regarding map requirements, please refer to items (a) through (h) under (l) of this Rule.

## Rule M-3-(2)

A comprehensive reclamation plan for the land affected must be formulated and submitted. This plan must address those items enumerated in (a) through (f) under (2) of this Rule. The Division staff specifically requires more information as detailed below:

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- -- Disposal or redeposition plans for overburden, tailings, waste and rejected materials must be addressed (volumes, handling, backfilling, etc.), as well as a soil handling plan for reclamation. There must be some indication of the depth of soil that will be replaced, fertilization methods, methods to be used in reducing compaction, etc.
- -- It is stated that no highwalls will be left, and in addition, all sidewalls will be sloped. Please indicate what type of slopes are anticipated. A cross-section needs to be attached to characterize the sidewalls. Stability must also be addressed. It is also mentioned that high vertical walls are not anticipated. This indicates that there is a possibility of one existing. Please clarify.
- -- It is stated that the access road will likely be consumed as a part of mining. A commitment is needed as to whether or not a dirt road will be left after reclamation. If so, this should be justified as to why. If it is not to remain, its reclamation must be addressed.
- -- The reclamation plan must address post mining topography and the reconstruction of drainage patterns, erosion protection, etc.
- -- A complete revegetation plan must be developed for all areas disturbed by mining. The plan is to include proposed seed mixture(s) showing species to be used and rates of seeding (e.g. pounds per acre) in pure live seed (PLS), methods to be used for seedbed preparation, seeding techniques, mulching types and techniques, and types, rates and methods of fertilization.

## Rule M-5

The applicant requests that the surety guarantee be waived. This issue will be presented to the Board. However, the applicant should develop an estimate as to how much it will cost in the event of abandonment for the State to do the reclamation work. This estimate could be in the form of a contract with the Division, upon approval of the Board of Oil, Gas, and Mining. Other acceptable forms of bonding are a corporate surety bond, letter of credit, cash, U.S. Treasury notes, or an escrow account.

## Rule M-10

- (2) Plans for disposal of used oil, solvents, etc. and the containment of spills from stored fuels, etc. should be presented (i.e., a spill prevention control plan.)
- (3), (8), (11) The applicant must address the sizing and reclamation of ditches, culverts, sedimentation ponds, etc. Available baseline data in the vicinity of the site should be presented regarding rainfall, streamflows, etc. for documentation of adequate sizing for sediment control devices.

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- (5) Highwall designs along with post-reclamation cross sections should be submitted, as discussed under Rule M-3-2 above.
- (6) There must be a more precise estimate of the amount of overburden and a handling plan developed accordingly.
- Will the 40 acre area be completely developed before reclamation efforts begin or will reclamation of stripped areas take place promptly after tar sands are removed?
  - (7) Reclamation of roads must be addressed as discussed under Rule M-3-2 above.
  - (12) A baseline vegatation study should be conducted to determine the species present on the site and to estimate ground cover. This information can be used to design and evaluate the revegetation plan and to set standards for judging revegetation success during the bond release period.
  - (14) The submittal does not contain any baseline soils information. Field work must be done to determine the amount and type of soil within the permit area. Included in the baseline data must be soil chemical and physical analyses. The applicant is advised to contact the local SCS for assistance in developing this information. Based on the soils investigation, a plan for removal and storage of soil must be submitted, including stripping depth and volume of soil An explanation of the topsoil protection measures used during storage is required.

In addition to the above, the applicant is advised to contact the Bureau of Land Management and the U.S. Fish and Wildlife Service with reference to the potential for threatened and endangered species existing on site.

The applicant has also been advised to contact Geokinetics regarding acquisition of pertinent information which may be applicable to the County's proposed mine site.

Should you have any questions or should you require assistance form the Division, please contact me at your earliest convenience.

Sincerely,

Reclamation Biologist/ Permit Supervisor

MMB/grc cc Jim Smith, DOGM Ev Hooper, DOGM

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